

REMARKS

Applicant respectfully requests continued examination of the present application, pursuant to and consistent with 37 C.F.R. § 1.114, and in light of the remarks which follow.

Claims 1-10 and 23-27 are pending. Claim 23 is amended. Claims 26 and 27 are added. Basis for these new claims may be found in the claims and specification as-filed. Applicants reserve the right to file at least one continuation application directed to any subject matter canceled herein.

The Applicant intends to request an interview with Examiner Mondesi following the present Request for Continued Examination, at his convenience.

Rejections Under 35 U.S.C. § 102

Claims 1-10 and 23-25 stand rejected under 35 U.S.C. 102(e) as being anticipated by Ruben et al. (U.S. Publication No. 2002/0072596)("Ruben").

To anticipate a claimed invention under 35 U.S.C. § 102, a reference must teach each and every element of the claimed invention. See *Lindeman Maschinenfabrik GmbH v. American Hoist and Derrick Company*, 221 USPQ 481, 485 (Fed. Cir. 1984). Applicant submits that Ruben does not disclose each element of the present invention.

Ruben discloses transferrin sequences, two of which (SEQ ID NO:4 and SEQ ID NO:6) can be derived from the lactoferrin molecule.

Ruben, at sections [0590] and [0591], discloses methods for treating hypertrophic scar and keloids. The disclosed methods are said to comprise the step of administering "a polynucleotide, polypeptide, antagonist and/or agonist of the invention". Ruben makes a clear distinction between "polypeptide" and "polypeptide fragment", see e.g. claim 11 and sections [0035], [0037], [0038], [0042], [0082], [0092], [0093], and [0115]. Sections [0590] and [0591] speaks of "polypeptides" only, not "polypeptide fragments". Clearly, this indicates that Ruben in sections [0590] and [0591] does not contemplate methods comprising the use of "polypeptide fragments".

Present claim 23 has been amended to refer to "peptides derived from lactoferrin". According to the present application as filed, "peptides derived from

lactoferrin" are exemplified as those peptides disclosed in WO 00/0730, i.e. peptides derived from amino acid 12 to amino acid 40, of human lactoferrin.

Applicant submits that the "peptides derived from lactoferrin" of the present application are different from the "polypeptides" contemplated to be used in the methods disclosed in sections [0590] and [0591] of Ruben. Applicant requests that the rejections under 35 U.S.C. § 102 be withdrawn.

In order to clarify the efficacy of particular peptides derived from lactoferrin of the present application, Dr. Kjell Olmarker, the named inventor of the present patent application, has performed experiments to investigate the effect of lactoferrin derived peptides on the formation of abdominal, post-surgical adhesions, adhesions and fat reactivity, and improved bone healing following laminectomy in the rat. In summary, controlled peritoneal injuries on the frontal abdominal wall of rats were performed, and then sutured. The area of adhesion of the intestines to the suture sites was monitored. Rat Group A was given the following peptide, administered locally during surgery (in the laminectomy before suturing), as well as additional peptide administered intra peritoneally directly after surgery and then 24 and 48 hours after surgery.

Peptide: HLBD1cyclic,

Glu-Ala-Thr-Lys-Cys-Phe-Gln-Trp-Gln-Arg-Asn-Met-Arg-Lys-Val-Arg-Gly-Pro-Pro-Val-
Ser-Cys-Ile-Lys-Arg

as corresponding to amino acids 16-40 of human lactoferrin.

Rat Group B received the same treatment progression, but received the following peptide:

Peptide: HLBD9,

Lys-Cys-Phe-Gln-Trp-Gln-Arg-Asn-Met-Arg-Lys-Val-Arg

as corresponding to amino acids 19-31 of human lactoferrin.

The Control Group received distilled water administered locally, administered intraperitoneally directly after surgery and then 24 and 48 hours after surgery.

The mean adhesion formation in Rat Group A, treated lactoferrin-derived peptide, was 3.0 ± 3 mm. The mean adhesion formation of Rat Group B, treated with lactoferrin-derived peptide was 2.3 ± 3 mm. In the control group, treated with distilled water, the mean adhesion formation was 13.4 ± 9 mm. Thus, Dr. Ohmarker's experiments show that the lactoferrin-derived peptides given intra peritoneally induced a statistically significant reduction of abdominal adhesions, in both concentrations.

Applicant would be pleased to provide experiments and data in detail, and in the form of a Declaration, for example, pursuant to 37 C.F.R. §1.132, at the Examiner's request.

Applicant refers to new claims 26-27, which are directed to a method for reduction of adhesion formation wherein the post-traumatic tissue injury is caused by surgery. Ruben does not disclose the reduction of adhesion formation, where the adhesions are caused by surgery.

Thus, in light of the above, Applicant's respectfully submits that Ruben does not anticipate claims 1-10 and 23-26, as well as new claims 26-27.

CONCLUSION

It is respectfully submitted that all rejections have been overcome by the above amendments. Thus, a Notice of Allowance is respectfully requested.

In the event that there are any questions relating to this amendment or the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at (703) 836-6620 so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: March 26, 2007

By: 

Deborah H. Yellin
Registration No. 45,904

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620